

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

1-2. (Cancelled)

3. (Previously Presented): A photocatalyst sheet comprising:

a substrate made of glass fiber,

a coated layer made of polytetrafluoroethylene (PTFE) coated on both sides of said substrate, and

a photocatalyst-containing layer coated on at least one side of said coated layer,

wherein said photocatalyst-containing layer contains tetrafluoroethylene-hexa-fluoropropylene copolymer (FEP) and apatite-coated photocatalyst particles having low water solubility,

said photocatalyst particles contain titanium oxide, and said apatite is either of apatite hydroxide, apatite carbonate, apatite fluoride, or apatite chloride, or a mixture thereof,

the particle diameter of said photocatalyst particles is 1 nm to 100 nm,

the ratio of said apatite-coated photocatalyst particles to said photocatalyst-containing layer is 10 – 40 weight %,

the coating quantity of said apatite coated on said photocatalyst particles is such that the weight loss ratio of the whole of said photocatalyst sheet is 10% or less when ultraviolet light of intensity of 18 mW/cm² is irradiated for one hour on the surface of said photocatalyst sheet,

the water contact angle of said photocatalyst sheet surface is 130 degrees or less,

whereby said coated layer can be peeled from said substrate when a pair of said photocatalyst sheets are mutually thermally welded to form a welded part and when said welded part is peeled off by a peeling test at the rate of 50 mm/min.

4. (Cancelled)

5. (Previously Presented): The photocatalyst sheet as set forth in claim 3, characterized in that the apatite-coated photocatalyst particles fixed in said photocatalyst containing layer have parts exposed from the surface of said photocatalyst containing layer.

6. (Previously Presented): The photocatalyst sheet as set forth in claim 3, characterized in that said apatite-coated photocatalyst particles are the photocatalyst particles either a part of the surface of which is coated with apatite, or a whole surface of which is coated with porous apatite.

7. (Cancelled)

8. (Previously Presented): The photocatalyst sheet as set forth in claim 3, characterized in that said photocatalyst particles are either or both of an ultraviolet light responsive type and a visible light responsive type.

9-25. (Cancelled)

26. (Previously Presented): A photocatalyst sheet comprising two or more photocatalyst sheets mutually welded to each other, each of said two or more photocatalyst sheets comprising:

a substrate made of glass fiber,

a coated layer made of polytetrafluoroethylene (PTFE) coated on both sides of said substrate, and

a photocatalyst-containing layer coated on at least one side of said coated layer,

wherein said photocatalyst-containing layer contains tetrafluoroethylene-hexafluoropropylene copolymer (FEP) and apatite-coated photocatalyst particles having low water solubility,

said photocatalyst particles contain titanium oxide, and said apatite is either of apatite hydroxide, apatite carbonate, apatite fluoride, or apatite chloride, or a mixture thereof,

the particle diameter of said photocatalyst particles is 1 nm to 100 nm,

the ratio of said apatite-coated photocatalyst particles to said photocatalyst-containing layer is 10 – 40 weight %,

the coating quantity of said apatite coated on said photocatalyst particles is such that the weight loss ratio of the whole of said photocatalyst sheet is 10% or less when ultraviolet light of intensity of 18 mW/cm² is irradiated for one hour on the surface of said photocatalyst sheet,

the water contact angle of said photocatalyst sheet surface is 130 degrees or less,

whereby said coated layer can be peeled from said substrate when a pair of said photocatalyst sheets are mutually thermally welded to form a welded part and when said welded part is peeled off by a peeling test at the rate of 50 mm/min.

27. (New): The photocatalyst sheet as set forth in claim 26, characterized in that the apatite-coated photocatalyst particles fixed in said photocatalyst containing layer have parts exposed from the surface of said photocatalyst containing layer.

28. (New): The photocatalyst sheet as set forth in claim 26, characterized in that said apatite-coated photocatalyst particles are the photocatalyst particles either a part of the surface of which is coated with apatite, or a whole surface of which is coated with porous apatite.

29. (New): The photocatalyst sheet as set forth in claim 26, characterized in that said photocatalyst particles are either or both of an ultraviolet light responsive type and a visible light responsive type.

30. (New): A method of manufacturing photocatalyst sheets as set forth in any one of claims 3, 5, 6, 8 and 26-29, comprising:

forming the layer made of polytetrafluoroethylene (PTFE) on both sides of said substrate made of glass fiber,

forming said photocatalyst-containing layer containing tetrafluoroethylene-hexa-fluoropropylene copolymer (FEP) by coating a dispersion containing apatite-coated photocatalyst particles onto said polytetrafluoroethylene (PTFE) layer, and

fixing said apatite-coated photocatalyst particles with a fluorocarbon resin which constitutes said photocatalyst-containing layer.

31. (New): A method of manufacturing photocatalyst sheets as set forth in claim 30 characterized in that said dispersion comprises said tetrafluoroethylene-hexa-fluoropropylene copolymer (FEP), the apatite-coated photocatalyst particles, and water.